

REMARKS

In response to the final office action, Applicant requests reconsideration of the rejection in view of the following remarks.

The Examiner has drawn attention to FIG. 21b of *Boppart* as disclosing the claimed invention.

FIG. 21b discloses a catheter with rotating blades for grinding selected tissue. An OCT imaging system is included to enable one to see what tissue is being ground. In some embodiments, the blades are used to reflect light outward into the lumen.

A confusing aspect of FIG. 21b is that it actually shows three different embodiments superimposed on the same drawing. Each embodiment is shown surrounded by dashed lines. This superposition of embodiments is made clear by the following discussion of FIG. 21b from col. 32, lines 55-61.

A forward-directed rotating blade with forward-directed imaging is shown in FIG. 21b. The concepts are similar to those described above except here the distal face 304 of the catheter 300 is open and is the site of tissue removal. *Three forward-imaging concepts are illustrated.* In FIG. 21b.i, various forward-directed scanning mechanisms can be implemented as was shown in FIGS. 4-8. Imaging is performed through the rotating blades 312 with the imaging plane located distal to the end 304 of the catheter 300. If the pitch of the rotating blades 312 is small, the duty cycle for imaging will be large. There will only be brief periods when imaging cannot be performed because the blade 312 is in the beam path. Acquisition can also be gated to only occur when the blade 312 is out of the beam path. *The second method in FIG. 21b.ii uses a single focusing element 320 and relies on the curvature or pitch of the blades 312 to reflect the imaging beam.* As the blades 312 rotate, the focus of the beam is translated across the imaging plane and is used to acquire a cross-sectional image of the tissue prior to removal. As stated above, this type of deflecting technique can be used solely for diagnostics.

Of these, only the embodiment labelled "ii" actually uses the blade as a reflective surface. The embodiment labelled "ii" features a single fiber leading to a focusing element 320 that directs the beam against the rotating blade 312. The remaining two embodiments do not use the blade.

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In that case, FIG. 21b fails to anticipate the claim because there is only one fiber, not two as required by the claim. Therefore, *Boppart* FIG. 21b fails to anticipate the claimed subject matter.

No fees are believed to be due in connection with the filing of this response. However, to the extent fees are due, or if a refund is forthcoming, please adjust our deposit account 06-1050.

Respectfully submitted,

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